

Appl. No. 09/884,147

Reply to Official Action mailed on January 27, 2005

Remarks/Arguments

Claims 1, 7-18, 21-25, 27-32, 34 and 36-42 remain in the application. Claims 1, 7, 9, 16, 18, 21, 25, 27, 29, 30-31 and 34 are amended. Claims 2-6, 19, 20, 26, 33 and 35 are cancelled.

Claims 25, 27, 29, 30 and 37 have been amended in order to avoid invoking 35 U.S.C. 112, sixth paragraph. In particular, all instances of phrases such as --the steps of-- have been deleted. Applicant wishes to note for the record that the amendments are neither narrowing, nor are the amendments being made for a reason substantially related to patentability. Applicant respectfully submits that no new matter has been added in the amendments.

Claim Rejections – 35 USC § 102

Claims 1, 25, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagakubo et al. (5515682).

Claim 1 has been amended and now recites limitations of old claims 2, 3 and 5. As such, amended independent claim 1 now corresponds to old claim 5. Examiner has stated that 5 is objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form. Therefore, amended independent claim 1 is now allowable.

Independent claim 25 has been amended and now recites the limitations of old claim 26 in addition to the limitations of old claim 25. Claim 26 was objected to as being dependent upon a rejected base claim. Thus, claim 25 is no longer anticipated by Nagakubo and is now allowable.

Independent claim 31 has been amended and now recites the limitations of old claim 33 in addition to the limitations of old claim 31. Claim 33 was objected to as being dependent upon a rejected base claim. Additionally, claim 31 has been amended and now recites: "an overcurrent limiting circuit." In contrast, old claim 31 recited: "at least one of

Appl. No. 09/884,147

Reply to Official Action mailed on January 27, 2005

an overcurrent limiting circuit ... and an overvoltage limiting circuit ...” This change clearly does not broaden the scope of amended independent claim 31. Thus, claim 31 is no longer anticipated by Nagakubo and is now allowable.

Claim 32 has been rejected as being anticipated by Nagakubo. Claim 32 depends from amended independent claim 31. Since amended independent claim 31 is not anticipated by Nagakubo, dependent claim 31 cannot be anticipated by Nagakubo. Therefore claim 32 is now allowable.

Claim Rejections – 35 USC § 103

Claim 16 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Nagakubo) in view of Aiki. Claim 16 has been rewritten in independent form and now incorporates the limitations of old claims 1 and 2 from which old claim 16 depended. Examiner has stated that Aiki discloses “wherein the overcurrent limiting circuit is disposed on at least one of the first substrate 6 and the first plate 9.” Applicant asserts that Nagakubo does not teach or suggest that the overcurrent limiting circuit be disposed on one of the first substrate and the first plate. As such, claim 16 is not obvious in light of Nagakubo. Similarly, Aiki does not teach or suggest that the overcurrent limiting circuit be disposed on one of the first substrate and the first plate. Therefore, Applicant asserts that the claim 16 is not obvious in light of Aiki. Similarly, applicant asserts that it would not be known to a person of ordinary skill in the art to provide a semiconductor laser module with an overcurrent limiting circuit, “wherein the overcurrent limiting circuit is disposed on at least one of the first substrate and the first plate.” As such, it is apparent that claim 16 is not obvious and therefore amended independent claim 16 is allowable.

Changes to the claims not addressed in arguments under 35 USC § 102 and 103

Claim 7 has been amended and is now in independent form. Claim 7 now incorporates limitations of old claims 1 and 2. Old claim 1 recited: “at least one of an overcurrent limiting circuit ... and an overvoltage limiting circuit ...” whereas amended independent claim 7 recites, “...an overcurrent limiting circuit...” Therefore, it is apparent

Appl. No. 09/884,147

Reply to Official Action mailed on January 27, 2005

that the changes in amended independent claim 7 have not resulted in a broadening of scope. Since old claim 7 was objected as depending from a rejected base claim, amended independent claim 7 is now allowable.

Claim 8 was objected to as being dependent upon a rejected base claim. No amendments have been made to claim 8. Claim 8 is dependent on amended independent claim 7, which is allowable and therefore, claim 8 is now allowable.

Claim 9 has been amended and is now in independent form. Amended independent claim 9 incorporates the limitations in scope associated with original claims 1 and 2 as well as those limitations specified in original claim 9. Amended independent claim 9 does not incorporate the limitations of old claim 6. Amended independent claim 9 still specifies,

*"a bypass channel between an upstream side and a downstream side of the thermo-module for bypassing the thermo-module; and
a diode disposed within the bypass channel and oriented for allowing current to flow therethrough when the flowing current is oriented in a direction for causing heating of the semiconductor laser element,
wherein in use circuit elements within the bypass channel and the diode provide an overcurrent limiting circuit to relieve the flow of an overcurrent in the direction for causing heating of the semiconductor laser element"*

Such a bypass channel and diode configuration is not taught or suggested by Nagakubo and therefore, amended independent claim 9 is neither anticipated nor obvious in light of Nagakubo. Similarly, amended independent claim 9 is not anticipated or obvious in light of US patent 4,803,361 by Aiki et al. (Aiki) alone or in combination with Nagakubo. Thus, amended independent claim 9 is allowable.

Claims 10-15 were objected to as depending from a rejected base claim. Claims 10-15 depend from amended independent claim 9, which is allowable and therefore, claims 10-15 are allowable.

Appl. No. 09/884,147

Reply to Official Action mailed on January 27, 2005

Claim 17 was objected to as depending from a rejected base claim. Claim 17 depends from claim 16, which is allowable and therefore claim 17 is allowable. No amendments have been made to claim 17.

Claim 18 was objected to as depending from a rejected base claim. Claim 18 has been amended and no longer recites, "at least another Peltier element between the first substrate and second substrate..." Further, claim 18 now depends from amended independent claim 9, which is allowable. Therefore, claim 18 is allowable.

Claim 21 was objected to as depending from a rejected base claim. Claim 21 has been amended to depend from amended independent claim 9, which is allowable. As amended independent claim 9 incorporates the limitations of old claim 2 (from which old claim 21 depended) as described hereinabove with regards "claim 9" it is apparent that no new subject matter is being introduced by this amendment. Therefore, claim 21 is allowable.

Claims 22-24 were objected to as being dependent from the rejected base claim. Claims 22-24 have not been amended. Claims 22-24 depend from amended independent claim 9, which is allowable and therefore, claims 22-24 are now allowable.

Claim 27, 29 and 30 were objected to as being dependent upon a rejected base claim. Claim 27, 29 and 30 been amended to depend from amended independent claim 25, which is allowable, instead of old claim 26, the limitations of which are now recited in amended independent claim 25. Therefore, claims 27, 29 and 30 are now allowable.

Claim 28 was objected to as depending from a rejected base claim. Claim 28 depends from claim 27, which is allowable and therefore claim 28 is allowable. No amendments have been made to claim 28.

Claim 34 was objected to as being dependent upon a rejected base claim. Claim 34 depends from amended independent claim 31, which is allowable. Since amended independent claim 31 is allowable, claim 34 is also allowable.

Appl. No. 09/884,147

Reply to Official Action mailed on January 27, 2005

Claim 36 was objected to as being dependent upon a rejected base claim. Claim 36 has been amended and now depends from amended independent claim 1, which incorporates the limitations of old claim 5. As such the scope of claim 36 has not changed. Since amended independent claim 1 is allowable, claim 36 is now allowable.

Allowable Subject Matter

Claims 37-42 were described as allowable in the office action. These claims have not been amended.

Please charge the amount of \$400.00 to Deposit Account No. 50-1142 for the payment of two additional independent claims in excess of three.

Please charge any additional fees required or credit any overpayment to Deposit Account No. 50-1142.

Respectfully,



Randy W. Lacasse, Reg. No. 34,368
Lacasse & Associates
1725 Duke Street
Suite 650
Alexandria, Virginia 22314
U.S.A

Date:

4/25/05

Phone: (703) 838-7683

Fax: (703) 838-7684

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.